

24 August 1965

Gentlemen:

Subject: Contract [REDACTED]

We are pleased to submit our proposal, P-5444, for the addition of film hold-down plates to Advanced Light Tables # 2 & 3 being designed and built under subject contract. We feel that this device will be of considerable help to the operators while viewing film with the stereoscopes. The hold-down plate will keep the film flat with the viewing surface over any position of stereoscope travel and provide quick and easy film hold-down with little effort or thought required by the operator. The proposed interlock system will provide optimum film protection, by preventing film from being transported or the pressure plate

STATINTL moved while it is in the down position.

STATOTHR

The price for the modification will be [REDACTED] installed on the two Advanced Light Tables using the stereoscope for film viewing. Addition of the hold-down plate will not add to the over-all dimensions of the tables. A weight increase of approximately 10 lb. will be experienced.

We trust that you will incorporate these modifications into the basic design.

Should you have additional questions on the design or operation of this equipment,

STATINTL please contact [REDACTED] at Area Code 814, 238-4311
for any information. The undersigned will be available for contractual discussions.

Very truly yours,

[REDACTED]
Contract Administration

JEH:cs

DECLASS REVIEW BY NIMA / DoD

STATINTL

ADVANCED FILM VIEWING LIGHT TABLE

A PROPOSAL FOR A FILM HOLD-DOWN PLATE

STATINTL An investigation of various types of roll film by [REDACTED] personnel showed that film can camber as much as 3/4" when extended over a 47-inch length. The film hold-down bars as proposed by [REDACTED] in Proposal P-3801 will accomplish little in removing this camber because they are located at each end of the 40" viewing surface. On light tables #2 and #3 it will be virtually impossible to maintain focus of the stereoscopes over any 2 cm. of travel unless the film is held flat against the viewing surface. Using instruments having an extremely small depth of focus, such as the [REDACTED] Stereoscope, will require the interpreter to continually change the instrument focus during image measurement.

STATINTL

STATINTL As a solution to this problem [REDACTED] proposed to install an optically flat glass hold-down plate of quality optical glass, (see Figure 1) lapped and polished to a flatness of 6 fringes. The hold-down plate will be mounted to the course Y-Y microscope carriage and transported over the entire viewing surface of the light table as the microscope is transported by the operator. The plate will be supported in a mounting frame with the frame attached to the course Y-Y microscope carriage by four solenoid-dashpots (see Figure 2). When a target area is spotted on the film, the solenoids will be energized and the hold-down plate slowly lowered (3-5 seconds) to compress the film flat on the viewing surface. Actuation will be by foot switch or hand switch, depending upon the desire of the customer. An electrical interlock will be incorporated into the lifting mechanism to prevent the inadvertent transport of film while the hold-down plate is bearing on the film. This will be accomplished by de-energizing the clutch mechanism in the film transport system. A second interlock will be incorporated on the microscope stage locks for the course adjustments to prevent the operator from moving the microscope stage in course X or Y with the hold-down plate in the down position. When the stage is unlocked in either course X or Y, the hold-down plate will lift itself automatically.

Approved For Release 2001/07/12 : CIA-RDP78B04747A001400030033-8

-2-

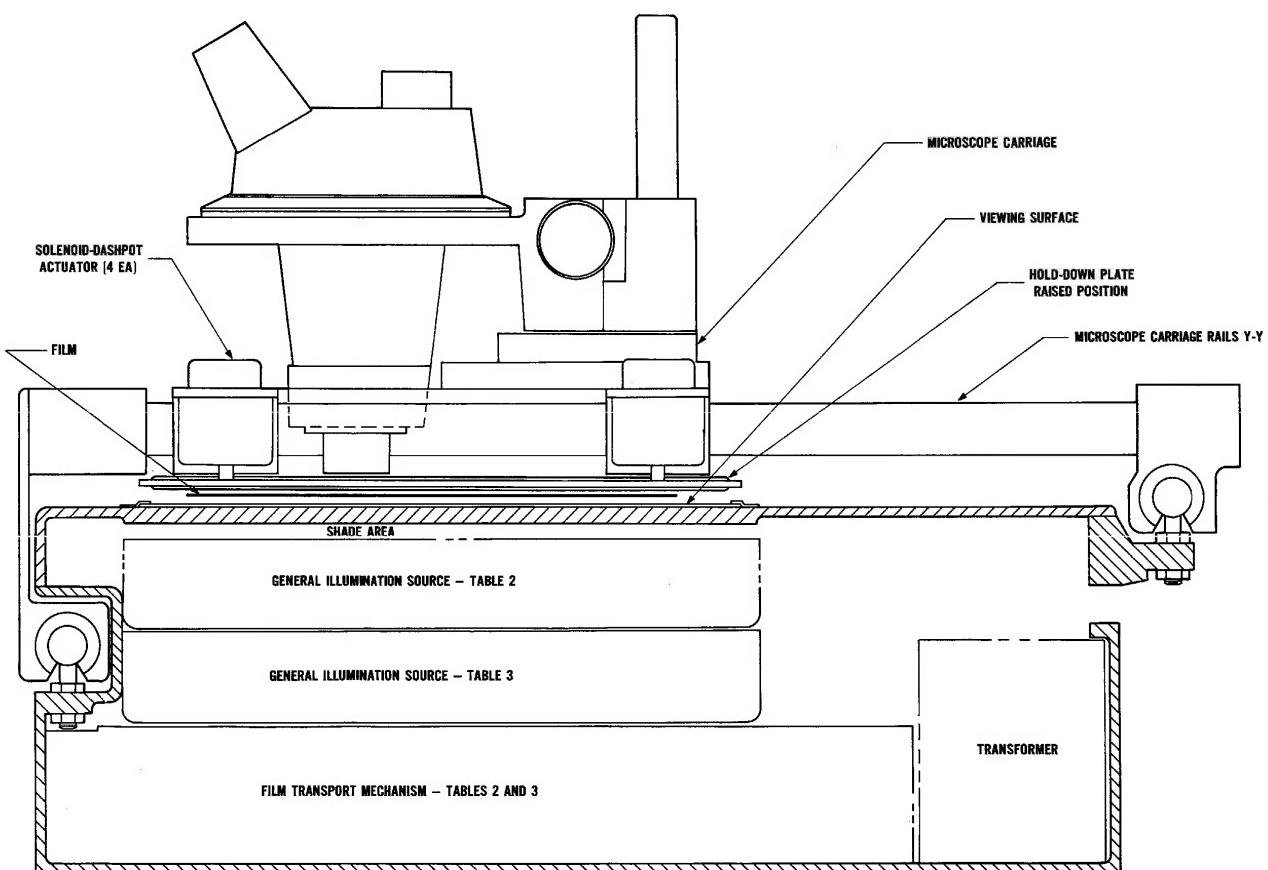


FIG. 1 FILM HOLD-DOWN PLATE

Approved For Release 2001/07/12 : CIA-RDP78B04747A001400030033-8

STATOTHR

Approved For Release 2001/07/12 : CIA-RDP78B04747A001400030033-8

Approved For Release 2001/07/12 : CIA-RDP78B04747A001400030033-8